

Glossary and Basic Terminology

Principles of Computing

Fall 2024

Contents

<i>B</i>	2
<i>C</i>	2
<i>D</i>	2
<i>F</i>	2
<i>G</i>	2
<i>I</i>	2
<i>J</i>	2
<i>L</i>	3
<i>M</i>	3
<i>O</i>	3
<i>P</i>	3
<i>R</i>	3
<i>S</i>	3
<i>T</i>	3
<i>U</i>	4
<i>V</i>	4
<i>W</i>	4
<i>Z</i>	4

B

- **bash**: The Bourne-Again Shell, the default shell on Linux and the most popular shell program in the world. Based on **sh** and released in 1989.

C

- **closed-source software**: Software whose source code is *not* freely available from the developers.
- **CLI**: Command-Line Interface. A method of interacting with an application based around executing text-based commands. Implemented using a **REPL**. Commonly requires only a keyboard.

D

- **directory**: **TODO**

F

- **file**: **TODO**
- **fish**: A user-friendly **shell** program.
- **folder**: **TODO**
- **FOSS**: **Free** and **Open-Source** Software.
- **free software**: Software that is distributed under a license that permits running the software for any purpose, as well as studying, modifying, and redistributing it.
- **freedom-respecting software**: See the entry on **free software**.

G

- **GUI**: Graphical User Interface. A method of interacting with an application by using visual symbols, metaphors, gestures, or pointing. Commonly involves the use of a mouse, touchpad, touch screen, or controller.
- **GNU**: GNU's Not **UNIX**. A massive **open-source** software project founded by Richard Stallman.
- **GNU GPL**: The General Public License, a very popular public software license made by Richard Stallman.

I

- **IPython**: A **command-line interface** for **Python**.
- **IDE**: Integrated Development Environment. A text editor with features that facilitate software development.

J

- **Jupyter**: An open-source software project that extends **IPython** to the Julia and R programming languages.

L

- **libre software**: See the entry on [free software](#).
- **Linux**: A large family of [open-source](#), [UNIX-like](#) operating systems based on using [GNU](#).

M

- **macOS**: A [UNIX-like operating system](#) developed by Apple and originally called Mac OS X.

O

- **open-source software**: Software that is distributed along with the source code that produced the software.
- **OS**: Operating System
- **OSS**: [Open-Source](#) Software.

P

- **POSIX**: Portable Operating System Interface
- **Python**: An interpreted, dynamically typed programming language

R

- **RAM**: Random Access Memory. Where all currently-running processes store their data.
- **recursion**: See the entry on [recursion](#).
- **REPL**: Read-Evaluate-Print Loop.

S

- **sh**: The Bourne [shell](#), precursor to [bash](#) and released in 1979.
- **shell**: A command-line interface for interacting with the [OS](#).
- **stdin**: The *standard input* stream. Used for receiving input from other processes.
- **stderr**: The *standard error* stream. Used specifically for sending error messages to other processes.
- **stdout**: The *standard output* stream. Used for sending messages to other processes.

T

- **terminal**: An application that invokes and manages a [shell](#).

U

- **UNIX**: The first *portable* [operating system](#) and the foundation for what would eventually become [Linux](#).

V

- **VSCode**: An incredibly popular [IDE](#) developed by Microsoft.
- **VSCodium**: An [open-source](#) version of the popular [VSCode IDE](#) with telemetry disabled by default.

W

- **Windows**: An [operating system](#) made by Microsoft.

Z

- **zsh**: Z shell, the default [shell](#) on [macOS](#).